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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/529,591	09/26/2005	Giuseppe Ferraro	NOTAR5.001APC	9025
20995 7590 07/17/2007 KNOBBE MARTENS OLSON & BEAR LLP 2040 MAIN STREET FOURTEENTH FLOOR IRVINE, CA 92614			EXAMINER CUEVAS, PEDRO J	
			ART UNIT 2834	PAPER NUMBER
			NOTIFICATION DATE 07/17/2007	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/529,591

Applicant(s)

FERRARO, GIUSEPPE

Examiner

Pedro J. Cuevas

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 May 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 March 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed on May 22, 2007 have been fully considered but they are not persuasive.
2. In response to applicant's argument that "the cited art fails to teach or suggest a plurality of unique continuous channels conveying fluid from the inlet to the outlet", it must be noted that the supercharging system disclosed by Kapich must have continuous channels which accept gases (air to be compressed and combusted exhaust as a source of mechanical power) in the input side and deliver gases (compressed air for combustion and combusted exhaust) on the output side.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 3-4 and 6-8 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,577,385 A to Kapich.

Kapich clearly teaches the construction of an electropneumatic engine supercharger system, comprising:

a bladed reversible impeller (79) adapted to operate both as an autonomous centrifugal blower pushing the fluid under pressure to a fluid outlet and as a device to recover energy;

a reversible engine/generator (83) integrally connected with the bladed impeller;
and

a fluid conveyor (Figures 6 and 7) containing the impeller, which cooperates with the impeller to handle and recover the kinetic energy the incoming fluid, the fluid conveyor comprising:

a convergent spiral of the fluid inlet (80) adapted to receive the incoming fluid and a divergent spiral of the fluid outlet (82);

wherein the impeller blades define continuous channels communicating at a first end with the fluid outlet and at a second opposite end with the fluid inlet, the impeller being either moved by a fluid supplied through said fluid inlet or by the reversible engine/generator in such a way as to be able to operate as a centrifugal blower delivering fluid under pressure through said fluid outlet.

It has been held that the recitation that an element is “adapted to” perform a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. *In re Hutchison*, 69 USPQ 138.

5. With regards to claim 3, Kapich disclose said fluid conveyor including a duct (88) for recirculation or partial exhaust of excess fluid.

6. With regards to claims 4 and 7, Kapich disclose said engine/generator being integrally connected to the bladed impeller by means of a shaft (73), and said shaft being inserted in the front and rear covers by means of antifriction bearings (column 1, lines 33-44).

It must be noted that forming in one piece an article, which has formerly been formed in two pieces and put together, involves only routine skill in the art. *Howard v. Detroit Stove*

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Works, 150 U.S. 164 (1893). The term "integral" is sufficiently broad to embrace constructions united by such means as fastening and welding. *In re Hotte*, 177 USPQ 326, 328 (CCPA 1973).

7. With regards to claim 6, Kapich disclose:

an engine/generator casing having a first cooler (66);

a rear cover integral with the said casing; and

a front cover having a second cooler (26), said single body containing the engine/generator and the bladed impeller.

8. With regards to claim 8, Kapich disclose the construction of an electropneumatic engine supercharger system using cast aluminum (column 5, lines 46-49).

Moreover, it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,577,385 A to Kapich in view of U.S. Patent No. 4,253,031 A to Frister.

Kapich disclose the construction of an electropneumatic engine supercharger system as disclosed above.

However, it fails to disclose an engine/generator being a high efficiency permanent magnet brushless electric three-phase synchronous machine, which is supplied, as an engine, with alternate three-phase variable high frequency current, and outputs, as a generator, an alternate three-phase current.

Frister teach the construction of a directly driven dynamoelectric machine - gas turbine generator structure comprising a high efficiency permanent magnet brushless electric three-phase synchronous machine (10), which is supplied, as an engine, with alternate three-phase variable high frequency current, and outputs, as a generator, an alternate three-phase, current for the purpose of allowing the air gap (14, 14a, 14b) to provide alternating flux to the armature core lamellae, thus inducing a voltage in the armature windings.

It would have been obvious to one skilled in the art at the time the invention was made to use the a high efficiency permanent magnet brushless electric three-phase synchronous machine disclosed by Frister on the electro-pneumatic engine supercharger system disclosed by Kapich for the purpose of allowing an air gap to provide alternating flux to the armature core lamellae, thus inducing a voltage in the armature windings.

11. Claims 9-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,577,385 A to Kapich in view of U.S. Patent No. 5,586,540 A to Marzec et al.

Kapich disclose the construction of an electropneumatic engine supercharger system as disclosed above..

However, it fails to disclose an electropneumatic engine supercharger system being assembled in series between a turbo supercharger and the fluid inlet.

Marzec et al. disclose the construction of a multiple stage supercharging system, comprising multiple compressors (12, 26) for the purpose of generating layers of additive pressure for supercharging an internal combustion engine.

It would have been obvious to one skilled in the art at the time the invention was made to use the multiple compressors disclosed by Marzec et al. on the electropneumatic engine supercharger system disclosed by Kapich for the purpose of generating layers of additive pressure for supercharging an internal combustion engine.

12. With regards to claims 10-12, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

13. With regards to claim 13, Marzec et al. disclose the engine being a two-stroke-cycle internal combustion engine.

Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892.

15. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after

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the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pedro J. Cuevas whose telephone number is (571) 272-2021. The examiner can normally be reached on M-F from 8:30 - 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg can be reached on (571) 272-2044. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Pedro J. Cuevas
July 5, 2007



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